CLAIMS

1-6. (Canceled)

7. (Currently amended) A method of manufacturing a lithium ion battery, comprising the steps of:

providing a plurality of stacked lithium cells with a polymer separator there between;

welding all anode current collectors of said plurality of stacked cells to an inside surface of an anode terminal or all cathode current collectors of said plurality of stacked cells to an inside surface of a cathode terminal;

positioning the stacked cells longitudinally within a four-sided housing having a front and a backside~~thereto so as to be parallel to the ends of the housing~~;

after said positioning step, welding the other of said anode current collectors and said cathode current collectors to said inside surface of said anode terminal and said inside surface of said cathode terminal, respectively; and

assembling the anode cell terminal at one end of the housing and the cathode cell terminal at the opposite end of the housing, wherein the plurality of stacked cells are enclosed within the housing by said anode cell terminal and said cathode cell terminal.

8. (Currently amended) The method of claim 7 wherein the welding steps comprise[[s]] ultrasonic welding.

9. (Previously presented) The method of claim 7 wherein the anode and cathode terminals are crimped to the housing, thereby providing a seal of the cell terminals to the housing.

10. (Currently amended) The method of claim 7 wherein said anode cell terminal or said cathode cell terminal includes a one way valve housing including a port attached thereto, further comprising the steps of inserting electrolyte into said port followed by [[of]] inserting a gas release vent into [[a]] said port ~~in the one way valve housing attached to the anode cell terminal~~.

11. (Currently amended) The method of claim 7 wherein the four-sided housing is in the configuration of an open rectangular sleeve prior to positioning the stacked cells therein.

12. (New) The method of claim 10, wherein said one-way valve housing includes threading on its outside surface.

13. (New) The method of claim 10, wherein said anode cell terminal and said cathode cell terminal are exposed and provide current collection along their full area.

14. (New) The method of claim 7, wherein said housing includes end protective plastic sleeves which fit within said housing to secure and isolate said plurality of stacked lithium cells therein, said plastic sleeves serving as gaskets for said anode cell terminal and said cathode cell terminal.